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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/852,484 | 05/10/2001 | David John Nevill | PH/5-30706A | 5851 |

26748 7590 05/31/2002

SYNGENTA CROP PROTECTION, INC.
PATENT AND TRADEMARK DEPARTMENT
410 SWING ROAD
GREENSBORO, NC 27409

EXAMINER

CLARDY, S

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1616

DATE MAILED: 05/31/2002

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/852,484

Applicant(s)

Nevill et al

Examiner

S. Mark Clardy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Mar 7, 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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Claims 1-20 are pending in this application which has been filed as a continuation of PCT/EP99/08559, filed November 8, 1999. Claims 1 and 10 have been amended

Applicants' claims are drawn to a synergistic composition for the selective control of broad-leaf weeds and grasses in crops which are resistant to protoporphyrinogen oxidase (PPO) inhibitors comprising (claim 1):

- a) a PPO inhibiting herbicide¹
- b) at least one additional pesticide (herbicide², fungicide, insecticide)
- c) optionally, a safener³.

Pages 10-326 are merely a generated list of permutations of herbicide combinations. No data is evident in the specification.

The rejection of claim 10 under 35 U.S.C. 112, second paragraph, is withdrawn in response to applicants' amendment.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

¹Claims 3-6: diphenyl ethers: acifluorphen, aclonifen, bifenox, chlornitrophen, ethoxyfen, fluroglycofen, formesafen, lactofen, oxyflurfen;
imides: azafenidin, carfentrazone, cinidon, flumiclorac, flumioxazin, fluthiacet, oxadiargyl, oxadiazon, pentoxazone, slufentrazone, flumipropyn, flupropacil, benzfendizone, formula A (claim 5);
phenylpyrazoles: nipyraclufen, pyraflufen;
fluazolate, thidiazimin.

²Claims 8, 9, 11-20 list virtually every known herbicidal agent.

³Claim 10: benzoxazin (benoxacor), MON 4660, flurazole, dichlormid, furilazole.

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al (US 6,127,318) further in view of Volrath et al (US 6,084,155) and Devine et al⁴.

Sato et al, again, teach the combination of glyphosate and a PPO inhibiting herbicide such as the triazolinones (col 2, lines 11-12), two of which are carfentrazone and sulfentrazone (col 3, lines 56-67).

Volrath et al, again, teach that applicants' PPO inhibiting herbicides were known (col 37-44).

Devine et al, again, teach that there were several known antagonists (safeners) of the PPO inhibiting nitrodiphenylether herbicides (Table 8.4, p. 157).

Again, one of ordinary skill in the art would be motivated to combine these references because Sato teaches the utility of PPO inhibiting herbicides which are further defined and characterized in the secondary references.

Thus, again, it would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to have combined PPO inhibiting herbicides with additional pesticidal agents, and safeners, because Sato teaches that glyphosate is useful in such a combination. One of ordinary skill in the art would expect that PPO inhibiting herbicides, with their known utility in treating weeds in PPO-herbicide resistant crops, could be combined with additional herbicides and

⁴Devine et al. *Physiology of Herbicide Action*. Section 8.4 "Inhibitors of protoporphyrinogen-oxidase". PTR Prentice Hall: NJ. P. 152-163. 1993.

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conventional additives.⁵ Further, it is conventional in the art to make use of safeners for herbicides, several of which are disclosed in Devine et al.

The declaration filed with the amendment presents data which shows unexpected herbicidal activity for one PPO inhibiting herbicide (Compound A, as in claim 5), in combination with other herbicides: metolachlor, atrazine, nicosulfuron, mesotrione, metolachlor + atrazine, and metolachlor + mesotrione. Thus a claim drawn to the composition of claim 1 which is limited to this PPO inhibiting herbicide would be allowable.

Note, however, that objective evidence of nonobviousness must be commensurate in scope with the scope of the claims. In re Tiffin, 171 USPQ 294. A showing limited to a single species can hardly be considered probative of the invention's nonobviousness in view of the breadth of the claims. In order for claim 1 to be found allowable, a representative sample of PPO inhibiting herbicides (i.e., not just Compound A) must be tested in combination with other herbicides.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103c and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

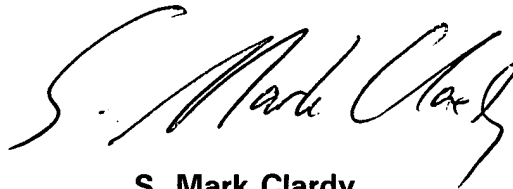
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the

⁵It is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose in order to form a third composition that is to be used for the very same purpose; the idea of combining them flows logically from their having been individually taught in the prior art. In re Kerkhoven, 205 USPQ 1069.

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mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Mark Clardy whose telephone number is (703) 308-4550.

A handwritten signature in black ink, appearing to read "S. Mark Clardy", is positioned above the printed name and title.

S. Mark Clardy
Primary Examiner
AU 1616

May 30, 2002